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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,222	07/25/2003	Michael J. Putnam	PGI6044P0052US	2436
32116	7590	05/03/2005	EXAMINER	
WOOD, PHILLIPS, KATZ, CLARK & MORTIMER 500 W. MADISON STREET SUITE 3800 CHICAGO, IL 60661			YAO, SAMCHUAN CUA	
			ART UNIT	PAPER NUMBER
			1733	

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/627,222

Applicant(s)

PUTNAM ET AL

Examiner

Sam Chuan C. Yao

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-13 is/are pending in the application.
- 4a) Of the above claim(s) 11-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I (claims 1-9) in the reply filed on 03-21-05 is acknowledged. The traversal is on the ground(s) that these two groups are closely related as to permit their consideration in a single application. This is not found persuasive because, as noted in a restriction requirement, the product as claimed can be made by a materially different process such as using an embossing operation to form 3-D pattern to fibrous web. This is a prima facie evidence that it would be burdensome for the examiner to also consider the non-elected product claims.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite, because it is unclear which hydroentangling step is being referred by the following limitation: "*said hydroentangling step being ...*". Is it referring to a 1st hydroentangling step, a 2nd hydroentangling step or both?

Claim 5 is confusing, because this claim appears to broaden claim 1 instead of further defining claim 1.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al (US 5,414,914) in view of Haid et al (US 5,240,764), Knoke et al (US 5,552,206), and James et al (US 5,822,833).

With respect to claims 1-2 and 5-6, Suzuki et al discloses a process of making a non-woven fabric, the process comprises providing a polyester fibrous web (48), subjecting the web to a preliminary hydroentangling operation (41) to consolidate the web and form a precursor web; and subjecting the precursor web to a primary hydroentangling operation to form the non-woven fabric, wherein the primary hydroentangling operation includes a step of drying the non-woven fabric (col. 4 line 44 to col. 5 line 40; examples 1-2, figure 9). While a precursor web is hydroentangled on a 3-dimensional configured support member, the support member does not appear to be a 3-D image transfer device such that a 3-D image is transferred to the web during a primary hydroentangling operation. However, such would have been obvious in the art, because James et al discloses the desirability of hydroentangling a web on a three-dimensional image transfer device to impart a desired 3-D design arrangement on the web (col. 1 lines 10 to col. 3 lines 51; figures 1A-1c, figures 10-12).

Art Unit: 1733

Suzuki et al does not teach using a blend of thermo-fusible and base fibers in forming a fibrous web and heat-activating the heat-fusible fibers in a hydroentangled web. However, it would have been obvious in the art to form a fibrous web comprising a blend of thermo-fusible and base fibers and heat-activate a hydroentangled web in a modified process of Suzuki et al, because: a) Haid et al, drawn to a spunlaced nonwoven web, discloses hydroentangling a web comprising base fibers and thermo-fusible binder fibers and then *"remelting the fusible fibers (i.e., heat setting) ..."* to *"improve durability and abrasion resistance"* (abstract; col. 2 lines 26-31); and, b) Knoke et al teaches "[a] special softness is attained when the non-woven fabric is bonded using water jets. ... for obtaining an especially high internal strength, thermoplastic binding fibers can be included as well" (col. 2 lines 47-50 and claims 15-16).

With respect to claims 3-4, see column 2 line 65 to column 3 line 6 of the Haid et al patent.

As for claim 7 requiring rayon for the base fibers, such would have been obvious in the art, since Suzuki et al is not restrictive to using a particular material for base fibers, and since it is well known in the art to hydroentangle a rayon non-woven web on a three-dimensional image transfer device to impart a desired 3-D design arrangement on the web as exemplified in the teachings of James et al (col. 5 lines 13-20). A preference on a type of base fibers material to use in forming a modified hydroentangled non-woven web of Suzuki et al is taken to be well within the purview of choice in the art.

Art Unit: 1733


With respect to claims 8-9, since it is conventional in the art to use heated air or hot rolls to activate the fusible binder fibers in a hydroentangled web in a modified process of Suzuki et al, these claims would have been obvious in the art.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (571) 272-1224. The examiner can normally be reached on Monday-Friday with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Sam Chuan C. Yao
Primary Examiner
Art Unit 1733

Scy
04-29-05